

## ABSTRACT

The invention provides processes for the recovery of a catalyst which are to be applied to the reactions wherein boron trifluoride or a complex thereof is used as the catalyst, that is, (I) a process for the recovery of a catalyst which comprises using as the reaction solvent a solvent containing a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon compound and, after the completion of the reaction, separating the reaction solvent from the reaction mixture; and (II) a process for the recovery of a catalyst which comprises extracting boron trifluoride or a complex thereof from the reaction mixture after the completion of the reaction by using a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon compound as the extracting solvent. According to the processes, boron trifluoride or complexes thereof used as catalyst can be easily separated from the reaction mixtures and re-used.